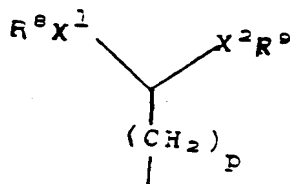


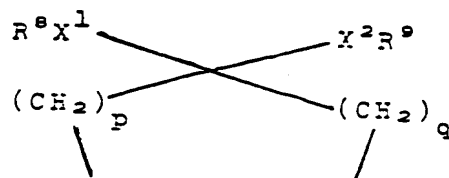
is hydroxy, lower alkoxy, aryloxy, substituted aryloxy, heteroaryloxy, substituted heteroaryloxy, amino, lower alkylamino, diloweralkylamino, acylamino, arylamino, substituted arylamino, guanidino, imidazolyl, indolyl, lower alkylthio, arylthio, substituted arylthio, carboxy, carbamoyl, lower alkoxy carbonyl, aryl, substituted aryl, aralkyloxy, substituted aralkyloxy, aralkylthio or substituted aralkylthio, wherein the aryl or heteroaryl portion of said substituted aryloxy, heteroaryloxy, arylamino, arylthio, aryl, aralkyloxy aralkylthio group is substituted with a group selected from halo, lower alkyl, hydroxy, lower alkoxy, amino, aminomethyl, carboxyl, cyano, or sulfamoyl; R^2 and R^7 are the same or different and are hydrogen or lower alkyl; R^3 is hydrogen, lower alkyl, phenyl lower alkyl, aminomethylphenyl lower alkyl, hydroxyphenyl lower alkyl, hydroxy lower alkyl, acylamino lower alkyl, amino lower alkyl, dimethylamino lower alkyl, guanidino lower alkyl, imidazolyl lower alkyl, indolyl lower alkyl, or lower alkyl thio lower alkyl; R^4 and R^5 are the same or different and are hydrogen, lower alkyl or Z, or R^4 and R^5 taken together form a group represented by Q, U, V, Y, D or E, wherein Z is



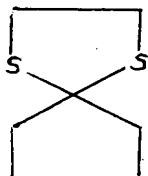
wherein X^1 and X^2 are independently selected from O, S and CH_2 , R^8 and R^9 are the same or different and are

lower alkenyl, lower alkynyl, cycloalkyl having 3 to 8 carbon atoms, hydroxy lower alkyl, or $-(CH_2)_n Ar$, wherein n is 0, 1, 2, or 3 and Ar is substituted furyl, thienyl or pyridyl, wherein said substituted furyl, thienyl or

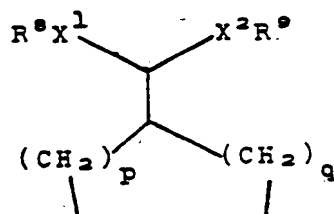
pyridyl groups are substituted with at least one group that is independently selected from hydrogen, C₁ to C₄ alkyl, lower alkoxy, lower alkylthio, halo, CF₃ and hydroxy, or R⁸ and R⁹ taken together form a group W, wherein W is a single bond or a methylene bridge or a substituted methylene bridge and one of X¹ and X² is methylene, or W is an alkylene or substituted alkylene bridge having 2 or 3 carbon atoms, said substituted methylene bridge or said substituted alkylene bridge having one or two substituents selected from lower alkyl, aryl and aryl lower alkyl groups, and p is 0 to 2; with the proviso that at least one of R⁴ and R⁵ is Z, with the proviso that if R⁴ is Z and p is 0 then X¹ and X² must both be methylene, and with the proviso that if X¹ and X² are both methylene then R⁸ and R⁹ must form a bridge W; wherein Q is



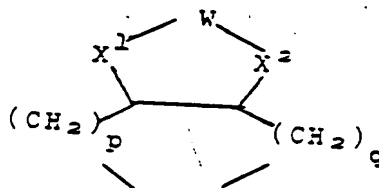
wherein R⁸ and R⁹ are as defined above or are lower alkyl, X¹ and X² are as defined above, p is 0, 1 or 2, q is 0, 1 or 2, with the proviso that the sum of p and q must be 1, 2 or 3, with the proviso that if p is 0 then X¹ and X² must be methylene, with the proviso that if X¹ and X² are methylene then R⁸ and R⁹ taken together form a bridge W, wherein W is as defined above, and with the proviso that Q is not



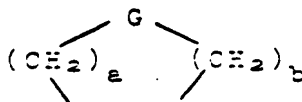
wherein V is



wherein R^8 , and R^9 are as defined above or are lower alkyl, X^1 and X^2 are as defined above, p is 0, 1 or 2 and q is 0, 1 or 2, with the proviso that the sum of p and q is 1, 2 or 3, with the proviso that if X^1 and X^2 are CH_2 then R^8 and R^9 taken together form a bridge W , wherein W is as defined above; wherein U is



wherein W is as defined above, except that W may be a methylene bridge when X^1 and X^2 are oxygen or sulfur, X^1 and X^2 are as defined above provided both are not methylene when R^1 is phenylethyl, benzylthiomethyl, 4-chlorobenzylthiomethyl, 2-phenylethylthiomethyl, naphthylmethylthiomethyl or thienylmethylthiomethyl, p is 0, 1 or 2, q is 0, 1 or 2, with the proviso that the sum of p and q is 1 or 2, [and] with the proviso that if p is 0, X^1 must be CH_2 , and with the proviso that when X^1 , X^2 and W are methylene and p is 0, q is not 1; wherein Y is

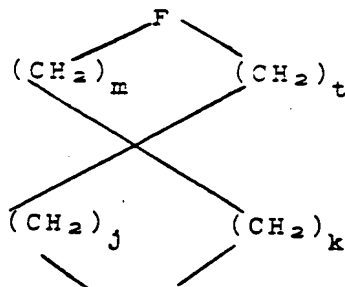


wherein G is oxygen, sulfur or CH_2 , a is 2, 3, or 4 and b is 1, 2, 3, 4, or 5, with the proviso that the sum of a and b is

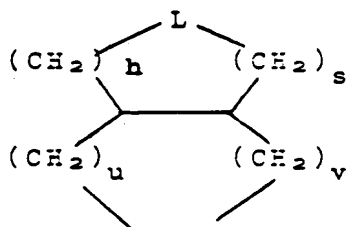
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5, 6, or 7 or G is CH₂, a is 1 or 2, b is 1 or 2, with the proviso that the sum of a and b is 1, 2 or 3, with the proviso that the sum of a and b may be 1, 2 or 3 only if R¹ is lower alkyl substituted with aralkylthio or aralkyloxy;

wherein D is



wherein F is O or S, j is 0, 1 or 2 and k is 0, 1 or 2, with the proviso that the sum of j and k must be 1, 2 or 3, and m is 1, 2 or 3 and t is 1, 2 or 3, with the proviso that the sum of m and t must be 2, 3 or 4; and wherein E is



wherein L is O or S, u is 0, 1 or 2 and v is 0, 1 or 2, with the proviso that the sum of u and v must be 1 or 2, and h is 1 or 2 and s is 1 or 2, with the proviso that the sum of h and s must be 2 or 3.